

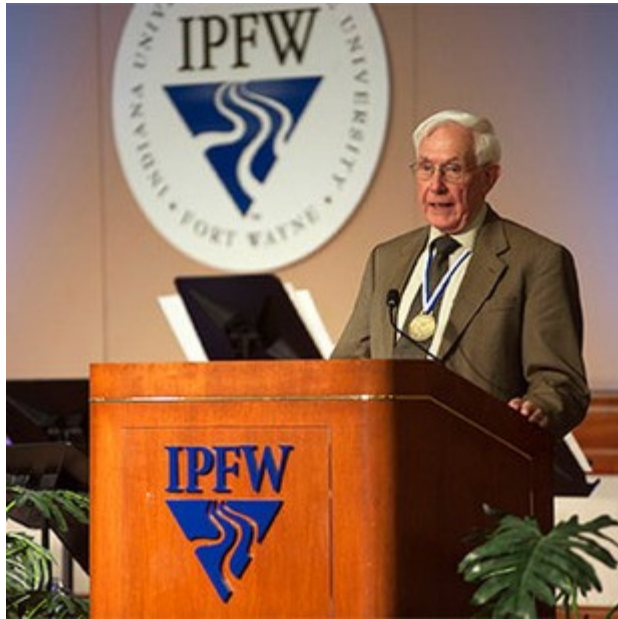
50 plus years a Hoosier mathematician



Imagine completing your Ph.D. and then taking your first job on a college campus that was not even built yet. This is what Lowell Beineke did 53 years ago when he accepted a position at Indiana University - Purdue University Fort Wayne. He had just completed his graduate work at the University of Michigan in the spring of 1965 when he moved to Fort Wayne and the unfinished campus. Lowell probably felt at home a little bit as he is a Hoosier, being born in Adams County (just south of Fort Wayne) and completing his undergraduate studies at Purdue University.

Dr. Beineke stayed at IPFW. For more than fifty years, he has been an active leader on campus, in mathematics, and in the MAA. During that long career, Lowell has been able to participate in every major event in the campus' history and has watched as the campus grew to its current size of more than 10,000 students. The Department of Mathematical Sciences has grown from four faculty to twenty-nine.

Dr. Beineke also holds IPFW's first named professorship, the Jack W. Schrey Professor of Mathematics. In 2012, the IPFW College of Arts and Sciences founded the Lowell W. Beineke award in his honor, which "In recognition of Professor Beineke's achievements, the executive committee of the College of Arts and Sciences will occasionally bestow on other members of the faculty of the college who have demonstrated a similar commitment to the mission of the college and whose scholarly, teaching, and service contributions are of the highest order." He has won many teaching awards, and interestingly, from three different universities: IPFW, Indiana University, and Purdue University. The Beineke Scholarships for undergraduate mathematics majors were created in his honor.



Consistently throughout his professional career, Lowell has been an active member of the Mathematical Association of America (MAA). He served as the Indiana section's vice-chair and chair from 1985-1987, as the section governor 1990-1993. Lowell also served on the MAA Board of Governors from 2005-2008, while he was editor of *The College Mathematics Journal*. Concurrently, he also served as a member of the MAA's executive committee from 2006-2008. Dr. Beineke has been awarded the section's Distinguished Teaching Award (1997) and Distinguished Service Award (1998). In 2014, Lowell received the Certificate of Meritorious Service from the MAA.

In the midst of his graduate studies, Dr. Beineke spent a year at University College London, leading to a life-long connection with the British mathematical community. He returned to England five more times on sabbatical leaves over the course of his career. This connected Lowell to the larger international community and he has attended conferences and presented papers in China, Egypt, India, Japan, South Africa, Thailand, India, Japan, South Africa, and Zimbabwe among other locations.

Dr. Beineke has served on the editorial boards of the *Journal of Graph Theory*, (1977-2009) and the *International Journal of Graph Theory* (1992-2018). Lowell has authored or co-authored more than a hundred papers and nine edited books on graph theory, with his most recent book, *Topics in Chromatic Graph Theory*, with Robin Wilson, being published in 2015. He is well known for the Beineke Theorem on Line Graphs, which is a characterization of line graphs that demonstrates that there are nine minimal graphs that are not line graphs, and any graph that is not a line graph has one of these nine graphs as an induced subgraph. That is, a graph is a line graph if and only if no subset of its vertices induces one of these nine graphs.

SOURCES

The Communicator, IPFW's student newspaper, May 21, 2015

Beineke, L., undated Curriculum Vitae

Wikipedia entry on Line Graphs

IPFW Department of Mathematical Sciences Archives

Inside IU, October 22, 2014